12-22-04

## PATENT COOPERATION TREATY



# **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P600	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)							
International application No. PCT/JP2003/004884	International filing date (day/n 17 April 2003 (17.04		Priority date (day/month/year) 17 April 2002 (17.04.2002)					
International Patent Classification (IPC) or national classification and IPC A61K 7/06, 45/00, A61P 17/14, C07D 271/08, 313/00, 493/04, 493/06, 493/08, 493/16								
Applicant TAISHO PHARMACEUTICAL CO., LTD.								
<ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> </ol>								
2. This REPORT consists of a total of	6 sheets, includi	ing this cover s	heet.					
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).								
These annexes consist of a total of sheets.								
3. This report contains indications rela	ating to the following items:							
I Basis of the report		•						
П Priority								
III Non-establishment	of opinion with regard to novel	ty, inventive st	ep and industrial applicability					
Tack of smiths of ins	vention							
Reasoned statemen	V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
VI Certain documents	VI Certain documents cited							
VII Certain defects in the	he international application							
VIII Certain observations on the international application								
Date of submission of the demand	Date	Date of completion of this report						
13 November 2003 (13.	11.2003)	28 June 2004 (28.06.2004)						
Name and mailing address of the IPEA/JP	Autho	thorized officer						
Facsimile No.		Telephone No.						

Form PCT/IPEA/409 (cover sheet) (July 1998)

International application No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP2003/004884

I. Basis of the report						
1. With	regard to	the elements of the international application:*				
$\boxtimes$	the inte	rnational application as originally filed				
	the desc	cription:				
	pages	, as originally filed				
	pages	, filed with the demand				
	pages	, filed with the letter of				
	the clai	ms:				
	pages	, as originally filed				
	pages	, as amended (together with any statement under Article 19				
	pages	, filed with the demand				
	pages	, filed with the letter of				
	the dra	wings:				
	pages	, as originally filed				
	pages	, filed with the demand				
	pages	, filed with the letter of				
	the secur	ence listing part of the description:				
	pages	, as originally filed				
	pages	61 1 21 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	pages	, filed with the letter of, filed with the demand				
the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language which is:  the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  the language of publication of the international application (under Rule 48.3(b)).  the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).  3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international						
pre	, ·	examination was carried out on the basis of the sequence listing:  ned in the international application in written form.				
. <u> </u>	filed to	ogether with the international application in computer readable form.				
<u> </u>	furnis	hed subsequently to this Authority in written form.				
▎▕▃	=	hed subsequently to this Authority in computer readable form.				
		statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the ational application as filed has been furnished.				
	-	tatement that the information recorded in computer readable form is identical to the written sequence listing has furnished.				
4. [	The a	mendments have resulted in the cancellation of:				
		the description, pages				
		the claims, Nos				
		the drawings, sheets/fig				
5.	This re	eport has been established as if (some of) the amendments had not been made, since they have been considered to go if the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**				
* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).						
** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.						

International application No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP2003/004884

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability							
1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:							
	the entire international application.						
$\boxtimes$	claims Nos	·					
becaus							
$\boxtimes$	the said international application, or the said claims Nos	amination (specify):					
S	ee supplemental sheet						
į							
the description, claims or drawings (indicate particular elements below) or said claims Nosare so unclear that no meaningful opinion could be formed (specify):							
	•						
	the claims, or said claims Nos	are so inadequately supported					
	no international search report has been established for said claims Nos.	7					
2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid							
seque	nce listing to comply with the standard provided for in Annex C of the Administrative Instruction the written form has not been furnished or does not comply with the standard.	AULIS.					
	the computer readable form has not been furnished or does not comply with the standard.						

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/JP 03/04884

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.1

Claim 7 pertains to a method for the treatment of the human body by therapy, and thus relates to a subject matter for which this International Preliminary Examining Authority is not required to carry out an international preliminary examination under the provisions of PCT Article 34(4) and PCT Rule 67.1(iv).

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 03/04884

<b>V</b> .	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement					
	Novelty (N)	Claims	1-6, 8-10	YES		
		Claims		NO		
	Inventive step (IS)	Claims	1-6, 8-10	YES		
		Claims		NO		
	Industrial applicability (IA)	Claims	1-6, 8-10	YES		
		Claims	•	NO		

#### 2. Citations and explanations

#### Documents:

Document 1: WO 01/74164 A1 (The General Hospital Corp.),

11 October 2001

Document 2: EP 606044 A1 (Sandoz Ltd.), 13 July 1994

Document 3: JP 9-202781 A (Sankyo Co., Ltd.), 05 August

1997

Document 4: US 3687982 A (Commercial Solvents Corp.), 29

August 1972

### Explanation:

The inventions that are set forth in claims 1-6 and 8-10 are not disclosed in documents 1-4 cited in the international search report, and are not obvious to a person skilled in the art.

International application No. PCT/JP 03/04884

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 1 pertains to hair papilla cell growth promoters in which the active ingredient is a compound that is defined by a desired property, namely, exhibiting an "activity that inhibits the functions of WNT-5A," and claim 2 pertains to hair papilla cell growth promoters in which the active ingredient is a compound that is defined by a desired property, namely, being "WNT-5A production inhibitors." Claims 1 and 2 include various compounds that exhibit such properties; however, only a portion of the claimed compounds are disclosed in the sense of PCT Article 5, and the compounds are not fully supported by the disclosures in the description in the sense of PCT Article 6.

Furthermore, it is impossible to specify the scope of the "compounds exhibiting an activity that inhibits the functions of WNT-5A" or of the "WNT-5A production inhibitors" even with consideration of common technical knowledge at the time of filing; therefore, claims 1 and 2 do not fulfill the requirement of clarity in the sense of PCT Article 6.